

## REMARKS

Claims 1-19 are pending in the present application and stand rejected. Claims 1, 4, 8, 11, 14, 16 and 19 have been amended.

### REJECTION OF CLAIMS 1-2, 4-9 AND 11-19 UNDER 35 U.S.C. § 102(B)

#### Claim 1

Claim 1, as amended, recites receiving a signal from a source over a network, determining a signal path and a processing algorithm from a plurality of signal processing algorithms based on a transmission destination, and processing the received signal according to the determined algorithm.

For example, referring, *e.g.*, to FIGS. 1 and 2 and paragraphs 14-15 of the specification, a system 10 includes a transmitter 12 and a distribution gateway 16. Transmitter 12 includes a cellular or landline telephone, network phone, other communication device or a voice generation computer that generates a voice sound signal for transmission to end units (users 24 or voice recognition servers 26) over a network, such as a wireless network or a primarily non-wireless network (*e.g.*, Internet). Distribution gateway 16 includes a processor 17, a receiver 18, a transmitter 19, and a database 20. Receiver 18 in distribution gateway 16 is preferably a wireless communication module capable of receiving voice and data via a wireless communication link. Transmitter 19 in distribution gateway 16 is preferably a wireless communication module capable of sending voice and data via a wireless communication link. Distribution gateway 16 is in communication with one or more user end units 24 and one or more automated speech recognition (ASR) servers 26, either directly or over a network.

Processor 17 compares an address included in the voice transmission signal from transmitter 12, such as an Internet Protocol (IP) address, a telephone number, or other method of identifying an incoming call, to a lookup table stored in database 20. The processor applies one of a number of signal processing algorithms depending upon the results of the comparison.

Because there is a fundamental difference between the way humans process auditory input and the way ASR servers process voice input, different algorithms are applied to the voice transmission signal to optimize the benefit for the determined destination. For example, if the destination is an ASR server 26, the algorithm converts the transmission to digital form (if not already in digital form) and performs other digital signal processing that benefit the process the ASR server will perform.

In contrast, Ladden, at *e.g.*, FIG. 3 and col. 2, line 60 to col. 3, line 11, teaches that a wireless communication system includes a means for establishing a speech communication between the wireless communication system and a mobile station compatible with the wireless communication system, where the speech communication implements speech coding functions in the wireless communication system and a codec in the mobile station compatible with speech. The wireless communication system also includes a means for determining that the mobile station requires connection to the speech recognition system and a means for instructing the mobile station to change from the codec in the mobile station compatible with speech to a codec compatible with speech recognition. After the mobile station has been instructed to change from the codec compatible with speech to the codec compatible with speech recognition, the wireless communication system employs means for coupling the mobile station to the speech recognition system to establish a link between the mobile station and the speech recognition system.

As such, Ladden teaches that a signal is processed according to an algorithm by the mobile station. That is, Ladden teaches that the algorithm is applied by a mobile station to an outbound signal rather than a received signal as is required by claim 1 of the application. Accordingly, Ladden fails to teach or suggest the limitations of claim 1.

### **Claims 8, 16 and 19**

Claims 8, 16 and 19, as amended, are patentable for reasons similar to those discussed above with reference to claim 1.

### **Claims 2, 9 and 17-18**

Claims 2, 9 and 17-18 are patentable by virtue of their respective dependencies from claims 1, 8 and 16.

### **Claim 13**

Claim 13 recites means for receiving a voice signal from a source over a network, and means for preprocessing the signal to determine a transmission destination. In contrast, Ladden fails in any manner to teach or suggest preprocessing a voice signal to determine a transmission destination.

### **Claim 4**

Claim 4, as amended, recites receiving at a user input unit an address for a transmission, directly receiving at the user input unit a phonation inputted for the transmission, and, after receiving the phonation, if the selected address is associated with a speech recognition device, processing the received phonation at the user input unit according to an algorithm associated with the speech recognition device.

Applicant respectfully submits that Ladden fails in any manner to teach or suggest that the mobile station processes a phonation according to an algorithm only after first receiving the phonation.

### **Claims 11 and 14**

Claims 11 and 14 are patentable for reasons similar to those discussed above with reference to claim 4.

### **Claims 5-6**

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Claims 5-6 are patentable by virtue of their dependency from claim 4.

### **Claim 12**

Claim 12 recites a first component configured to process a phonation at a user input source for reception by a human recipient, a second component configured to send the processed phonation to a transmission destination according to an address associated with the phonation on a determined signal path, and a third component configured to receive a change signal from the transmission destination.

For example, referring, *e.g.*, to FIG. 5 and paragraph 21 of the specification, a processor at the user origination unit or transmitter 12 is defaulted to process an outbound voice signal with an algorithm optimized for voice conversation (human recipient) (block 90). At block 92, the processed voice signal is sent to the addressee associated with the voice signal. At block 94, if the outbound voice signal goes to an ASR server, the ASR server sends a signal back to the user origination unit instructing the processor of the user origination unit to switch to an algorithm optimized for an ASR server. When the user origination unit receives a signal to switch, the unit processes the entered voice signals using an algorithm for an ASR server (block 96). The signal sent by the ASR server is preferably sent in Dual Tone Multiple Frequency also known as Touch Tone, but can also be sent in other formats.

In contrast, Ladden fails in any manner to teach or suggest receiving a change signal from the transmission destination in the manner described above.

### **Claims 7 and 15**

Claims 7 and 15 are patentable for reasons similar to those discussed above with reference to claim 12.



### REJECTION OF CLAIMS 3 AND 10 UNDER 35 U.S.C. § 103(A)

Mulvey fails to supply the teachings missing from Ladden, namely receiving a signal from a source over a network, determining a signal path and a processing algorithm from a plurality of signal processing algorithms based on a transmission destination, and processing the received signal according to the determined algorithm. As such, Ladden and Mulvey, taken either each alone or in combination fail to teach or suggest the limitations of claims 1 and 8. Accordingly, claims 3 and 10 are patentable by virtue of their respective dependencies from claims 1 and 8.



## CONCLUSION

All claims are now in condition for allowance. A Notice of Allowance is therefore respectfully requested. If the Examiner has any questions, the Examiner is invited to contact the Applicant's attorney listed below. **If the Examiner does not agree that all claims are now in condition for allowance, the Examiner is respectfully requested to contact the undersigned, prior to issuing a rejection of the claims, to arrange a telephone conference to discuss the application.**

Respectfully submitted,

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